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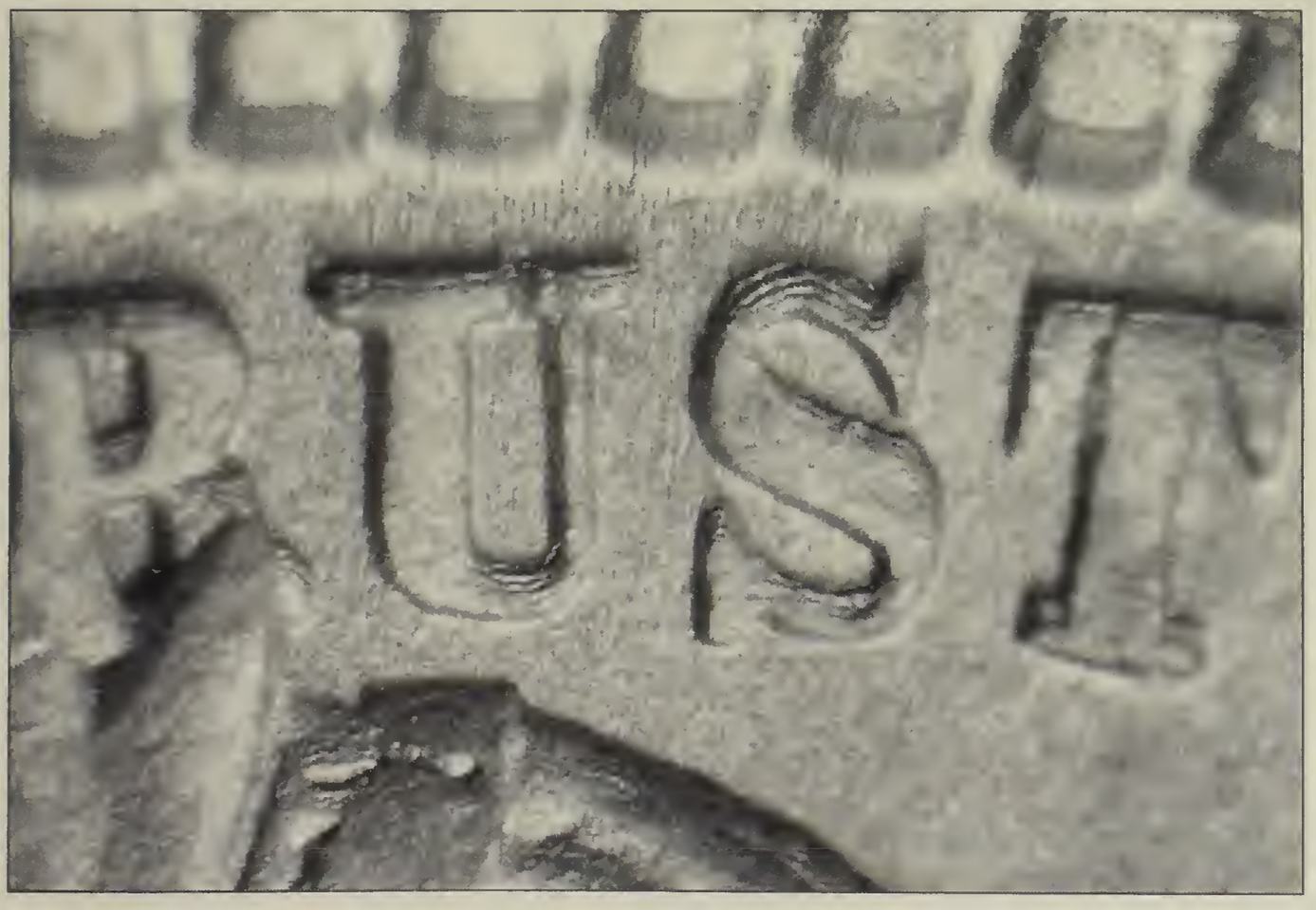
1892 Barber Quarter



With a Quadrupled Obverse Die

See page 21

Photo courtesy of John A. Wexler

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JOURNAL OF THE
BARBER COIN COLLECTORS' SOCIETY

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ANA Club Member C-146266

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BCCS PRESIDENT'S MESSAGE

This message, and the *Journal* issue it will appear in, close the 2011 year. I believe the Barber Society has had a very good year. The following paragraphs will provide some evidence for this opinion.

I attended the Baltimore Coin Show (now called an Expo with the Whitman name attached). It was a good show, many dealers present which I look to see and speak with. This is not my thought but someone shared with me that the hall was full but not of a massive area requiring walking miles each day.

On Friday, John Frost had set up a BCCS meeting at 3 PM. I must admit, I don't usually attend these regional BCCS meetings although I learned some relevant points as I enjoyed this gathering. Attending this gathering were East Coast friends, BCCS members I didn't know and non-member Barber collectors—some of advanced status. John had the Barber signs we decided to fund at the August ANA meeting. [These are attractive, 30 x 72 inches wide and tall. They travel well and John plans to "distribute" these at various rendezvous with a hand-off to the regional meeting coordinator. A neat plan.]

So, what did I learn in Baltimore? The beginning of the Barber Society and member meetings was the ANA Convention. The location of an ANA summer convention can be defined as from 'coast-to-coast.' I've attended most of these conventions since the late 1980s and I enjoy doing so as an ANA member and semi-seasoned convention attendee. What about a non-member of ANA, a new or intermediate Barber collector, a collector who has attended (only) the local show sponsored by the local coin club? You can add to this list of individuals who don't fly to a distant locale, who may be intimidated by a 300-dealer coin show, and who don't elect to stay at the near-by Motel 6. The 2012 ANA in Philadelphia defines these impediments well for the collector who is locally oriented and may know Stack's & Bowers (from *Coin World*) but has never purchased from them. John Frost saw the local connection as the route to find Barber coin collectors across the USA! The small(er) cities (e.g., Nashua, NH), the regional coordinator network and the easy to meet everyone who attends is the making of a successful recruiting program serving the interests of the BCCS focus.

Please consider the local aspect of this approach and keep in mind collectors who would be receptive to a regional meeting (in your company, if possible). May our members in the Philadelphia area reflect on this idea for the summer of 2012 and ANA.

As the 2011 year ends, please think of those who have very basic needs you can provide for in some manner. Spend time with those you love dearly and give a little to those we see as strangers.

Numismatic regards,
Phil Carrigan

BCCS Regional Update

By **John Frost**, BCCS Regional Program Chair

Our Regional Program continues in high gear with at least 14 meetings planned for this upcoming year in all parts of the country. I am extremely pleased with the support you have demonstrated with this new program. Our new BCCS Banners are being distributed to our different Regional Leads around the country.

Perhaps the best evidence of the program's success is the fact that we have grown BCCS membership by 10% in the past 4 months. We are introducing the BCCS to a lot of people who had never heard of us and are reengaging former members who are enthusiastic about what the Society is doing these days, with our Regional Program and our upcoming Varieties Surveys.

Some recent highlights: Following a joint BCCS-LSCC meeting in Boston (Bay State), our Baltimore meeting on Nov. 18th brought together 10 people and marked the debut of our new club banner. Some of the attendees from that meeting are shown in the photo.

Walt Kennedy has graciously volunteered to begin hosting BCCS meetings in the Southeast, beginning with the 42nd Annual Charlotte Coin Show in February. Walt will also look at other shows in the region, but the Charlotte event is a great start to expand our coverage on the East Coast.

West Coast Regional Lead **Glenn Holsonbake** hosted a small meeting in Portland at the PNNA (Pacific Northwest Numismatic Association) and picked up a couple new members. In early December he also hosted a new meeting at Houston's Money Show of the Southwest, with help from **Bob Duzan** who volunteered to take an active role in the Houston area. Next up for Glenn is February's Long Beach Expo, and April's PNNA show outside Seattle.

Richard Shimkus has volunteered to assist **Vern Sebby** at Central States, and possibly look at some other shows in the Midwest. Let us know at the website

(BCCS@barbercoins.org) if you are interested and able to help at any show.

Next up is our meeting at FUN in Orlando in January. We have an interesting educational program set for the meeting, and we will have a club table on the bourse floor with some interesting exhibits. Please stop by and say hi, and stay a while if you can. There is no better way to meet other Barber enthusiasts and it is great fun - just ask any of us who have spent time behind one! And you can help promote the club, and introduce people to Barber coinage. I have an aggressive goal: 7-10 new members at the FUN Show, and I think we should be able to do it.

As always, you can look in the *Journal* (see page 22), and on the website, for the list of upcoming Regional BCCS meetings. We also email any last-minute updates to the BCCS Blind Email List.

Hope to see you in Orlando, or at any of our upcoming meetings!

2012 BCCS Barber Quarter Varieties Census

Welcome to the first of four BCCS Varieties Surveys. After the success of our Rarity Surveys for the four Barber series a few years ago, the Society had expressed interest in conducting a population census for varieties. A Committee was formed to propose how to conduct this survey. Our thanks to **Bob Duzan**, **Dave Earp**, **John Frost**, and our Varieties Coordinator, **Steve Hustad**, for their work on this project.

This is the first installment, targeting Barber Quarters – the other three series will follow in successive years. Unlike before, however, the study and the associated questionnaire will consist only of a census form, where you can report the number of each variety that you hold, and in which grade(s).

For help in identifying the various types of varieties, please refer to other articles in this issue of the *Journal*. They should help you identify the different hubs, how to differentiate a repunched mintmark or a doubled die from shelf or strike doubling, and also how to report a RPM (e.g., west, east, etc.). For the web form, we hope to have links to numerous photos of varieties (or types of varieties) embedded in the form to assist in your identification of them. All you would have to do is click on the link and the photo will be displayed.

Rather than the survey form being strictly in date order, it is grouped by *Variety Category* to make it easier to report different coins for each type of variety. That is, doubled dies, repunched dates (RPD), repunched mintmarks (RPM), etc. For cross-reference purposes, we will try to list the different variety designations from several publications (e.g., David Lawrence *Complete Guide* book, *Cherrypickers Guide*, etc.) for those of you with different reference books.

Deadline for your response is May 31, 2012. We have planned a longer survey period than before because of the nature of the survey, and the fact it may take you longer to sort through your holdings looking for the varieties.

You have three ways to participate in this project:
1. You may answer the questionnaire online by filling out the forms on the BCCS website at www.BarberCoins.org
2. You may also go to the BCCS website and download an MS Excel spreadsheet which can be filled out and emailed to us at www.BCCS@BarberCoins.org.
3. You may fill out the enclosed questionnaire and mail to the BCCS c/o Secretary-Treasurer Eileen Ribar.

Please fill out the questionnaire using one of these three methods by **May 31, 2012**. We ask that you only answer the survey once, and please include your BCCS Member Number (this is on the mailing label for the Journal). If you have submitted one and later wish to make a correction, that is fine – just tell us in the "Notes" section that the response is a correction or represents additional coins, and include your BCCS number.

A favor: Please, please, please, ***if you can***, fill out the survey forms on-line (web form or Excel as noted in options 1 and 2 above), we would appreciate you doing so, as it will be much easier for us to tally the results. It takes only 2 minutes to tally an online submission, and 5 to 20 minutes to do a paper one, depending on what is reported. Plus, there will be more detailed descriptions and some photos on the web form. However, returning the paper survey is perfectly fine as well, so please do so if it is more convenient.

Instructions for the Census

Please enter the number of coins of each variety that you have in each grade in the appropriate boxes (no need to enter zero). Just the number of coins is needed. We are ***not*** worrying about split grades or numerical grading differences (example VG8 versus VG10).

If you have a variety that is not listed on the form, you can include it in the **Additional Varieties** space on the form.

If you have any questions, you may feel free to send email to us a BCCS@BarberCoins.org and we will try to answer them as best we can. Depending on the volume of questions, we may try to publish the questions and answers in the next issue of the Journal, which should be in your hands prior to the deadline for the survey.

Results in *Journal* and Web site

Thank you for your participation in this important project. The results will be published in the *Journal* and on the BCCS web site following the completion of the Census and Survey.

Editor's note: To assist you in discovering varieties within your quarter collection, the material in this article is condensed from BCCS Journal Vol. 12, No. 2, (pp. 7-11), Vol. 15, No. 4 (pp. 11-19), Vol. 16, No. 1 (pp. 12-16) and Vol. 16, No. 2 (pp. 18-21).

Barber Quarter Design Varieties

By **Steve Hustad**

Barber Quarter Hub Types

Quarters have always been my favorite among the Barber series. I've studied this series and the individual pieces closely. This close study has revealed a few things regarding fairly major hub changes that occurred twice for the obverse, and three times for the reverse. These differences and how to identify their characteristics are illustrated here.

Obverse Hub I, 1892 - 1900: Fairly well-known. The plate identifies five major characteristics of this initial hub.

1) The most noticeable feature - Liberty's inner ear detail is a lot shorter than on Hub II. Some describe the inner detail as being 'incomplete.'
2) The laurel wreath leaf tips are far more rounded than on Hub Type II.
3) The forked ribbon end next to Liberty's neck has a deep slit with narrow forked tips.
4) The main devices are of a slightly higher relief, with stronger edges on the headband inscribed with "LIBERTY."
5) Denticles are shorter, blend together more, and actually angle down toward the coin's field more than on Type II.

Use numbers 1 & 2 for the quickest identification.

Obverse Hub II, 1900 - 1916:

1) Liberty's inner ear detail is 'complete.'

2) The laurel wreath's leaf tips are noticeably more pointed.

3) The 'forked end' of the ribbon next to the neck is wider and shallower than on Type I. Also, note the more subtle differences in the other ribbon end.

4) The main devices are of a flatter and lower relief overall. The headband edges are weaker and often incomplete even on uncirculated specimens. This was likely done to improve the coin's wear characteristics, but more likely to facilitate easier striking and longer die life.

5) Denticles are longer, more separated and bolder than on Hub Type I.

Reverse Hub I, 1892 only: What happened with the initial reverse hub to cause a change in mid-stream of the first year? The logical answer is that there must have been some striking difficulties with the new design which were serious enough to force a change that couldn't wait.

Reverse Hub Type I's characteristics are fourfold:

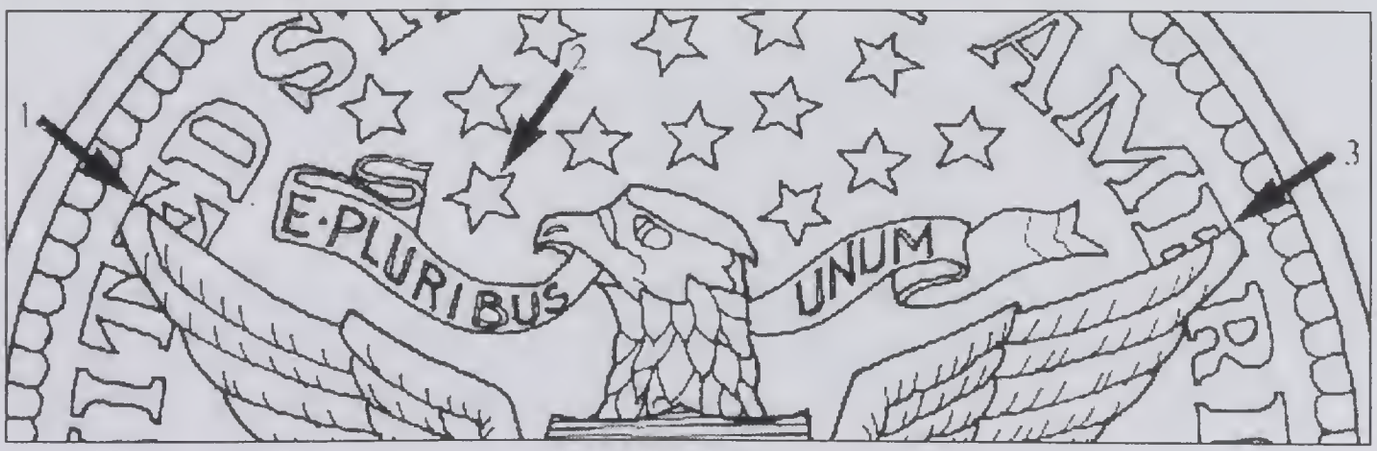
1) The eagle's right wing (on the left side to the viewer) covers less of the "E" in "UNITED" than on Type II. This is very easy to see.

2) The eagle's other wing covers slightly less of the "E" in "AMERICA" than on Type II.

3) The stars in the field appear to be a bit higher and more separated (smaller?) than on Type II.

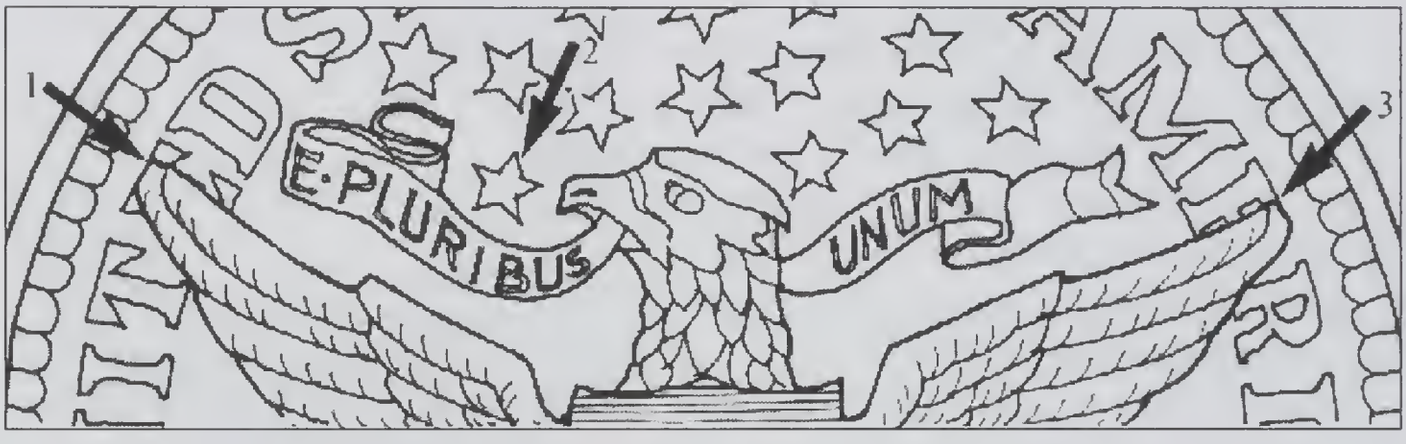
4) The eagle itself sits minutely lower in the field than on Type II.

Use number 1 for easiest identification. Type I Reverse coins seem a bit scarcer than Type II pieces - especially the "S" mint coins. More study is needed there.



Reverse Hub II, 1892 - 1900: The benchmark characteristics are of course just the opposite of those mentioned for Hub Type I:

1) The eagle's left wing (from the viewer's standpoint) now covers most of the "E" in "UNITED."
2) The other wing covers slightly more of that side's "E" than on Hub Type I.
3) The stars in the field appear closer together (larger?) and lower.
4) The eagle sits a bit higher in the field overall. This may be an optical illusion created by the subtle re-positioning of the other design features.



Things get very interesting in 1892 regarding the reverse hub changes. In this year we get some overlapping of available coins from all three mints - including some very interesting and collectable RPMs, RPDs, Double Dies, and large & small date varieties. For 1892, I've found the following pieces available with Type I or II reverses as noted. I'm sure there are more out there yet to be discovered.

KNOWN 1892 PIECES WITH TYPE I REVERSE

1892 I, SD
1892 I, LD
1892 O I, SD
1892 O/O, LD, RPM-E
1892 S I, SD
1892 S I, SD, Narrow reeded collar
1892 S/S I, SD, RPM-W

KNOWN 1892 PIECES WITH TYPE II REVERSE:

1892 II, LD
1/1892/2 II, SD, RPD-S & N
1/1892 II, (LD, or SD? - I haven't actually seen this one), RPD-S
189/1892 II, (LD, or SD? - I haven't actually seen this one), RPD-S
1892 II, (LD, or SD? - I haven't actually seen this one), DDO
1892 O II, LD
18/892/2 O II, (LD, or SD? - I haven't actually seen this one), RPD-S
1892 O/O II, (LD, or SD? - I haven't actually seen this one), RPM-E
1892 S II, LD
1892 S II, LD, DDR

Reverse Hub III, 1900 - 1916: This, the last modification I could detect, was used from 1900 to the end of the Barber Quarter run in 1916. This one is easy to detect also, using these two characteristics:

1) The eagle's wing tips noticeably protrude beyond the tops of the letters in USA, whereas on Type II they are even. About the same amounts of the "E" are covered as in Type II.

2) The denticles are elongated and more separated as was also done with the advent of Obverse Hub Type II.

Things get interesting again in 1900 with more overlapping types using both the Types I & II Obverse and Types II & III Reverse Hubs - involving all three mints. These are known to me. Others likely exist.

1900 I/II
1900 II/III
1900 O II/II
1900 O II/III
1900 S I/II
1900 S II/III

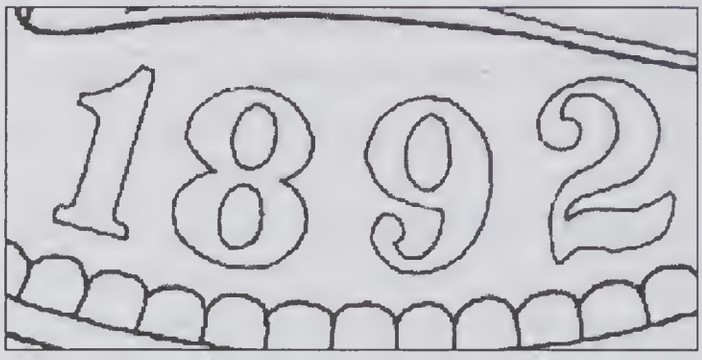
It would be interesting to know what other overlapping types 'lurk out there' for 1892 and 1900 pieces. Please check your collections and report back.

Barber Quarter Logo Types

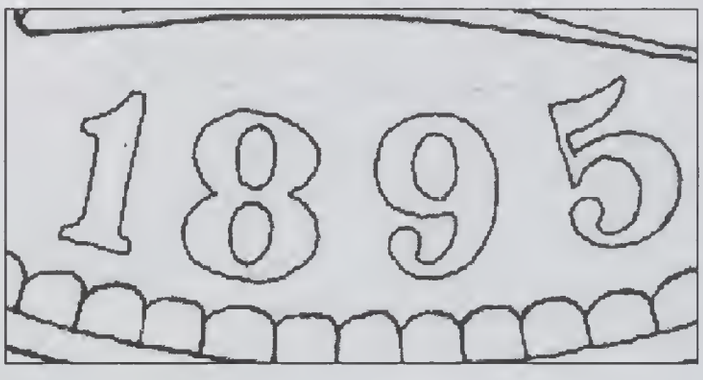
This section covers four size and style changes. Why the changes? The record doesn't say. So, since that interesting little mystery will likely remain unsolved, I'll just describe what I know. Maybe you can add something to this information.

Style A 1892 only: This group of date number punches was carried over from the Liberty Seated series of coins that directly preceded the Barbers. This is easily confirmed by a direct comparison of the two.

This style is characterized by:
1) Style as in pre-Barber coinage years. Angular serifs, with squared tips at 1s and 4s especially.
2) Large date (1892). Compare all 1892 dated pieces with style "B" described below.

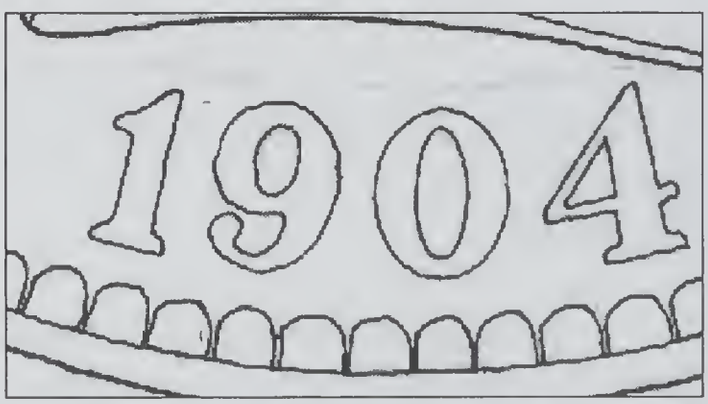


Style B 1892 - 1900:
This style is characterized by:
1) Style of numerals is similar to Style "A."
2) Size is reduced although it's not readily apparent until you put the two differing pieces side by side.



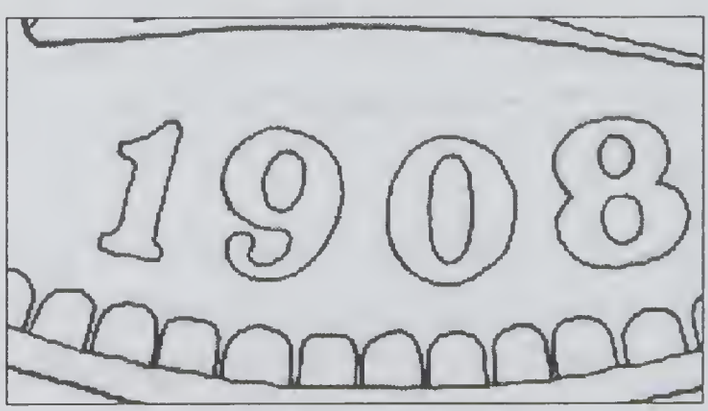
Both large and small dates (Styles A & B) exist for 1892 (see above comments). The two 1892 logotype styles exist with both Type I & II Reverse Hubs and from all three mints involved.

Style C 1900 - 1906:
This style is characterized by:
1) It is now a bit 'squatter' with fat serifs and a more slightly more rounded appearance overall. Compare especially the 1s, 3s, 4s & 5s.
2) Size is very slightly increased approximately to the size/height of Style "A."

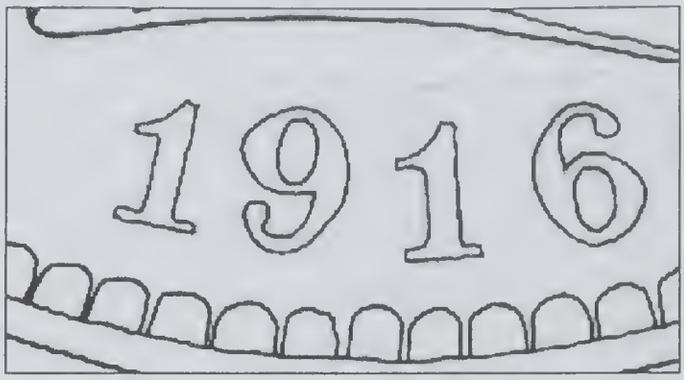


The most interesting aspect of this change at this juncture is that overlap occurs with Style "B" on some 1900 dated pieces from all three mints.

Style D 1907 - 1914:
This style is characterized by:
The style is as "C" above except, of course, these numerals are quite a bit more 'compressed' in height. This could be called a 'small date' if there was any overlap with Style "C." I haven't seen any yet. Perhaps you have.



Style E 1915 & 1916:
This style is characterized by:
1) Numerals have a cruder, more exaggerated look.
2) Size same as Style "D," though slightly thinner too.
No overlapping of 1914 or 1915 pieces has been noted.

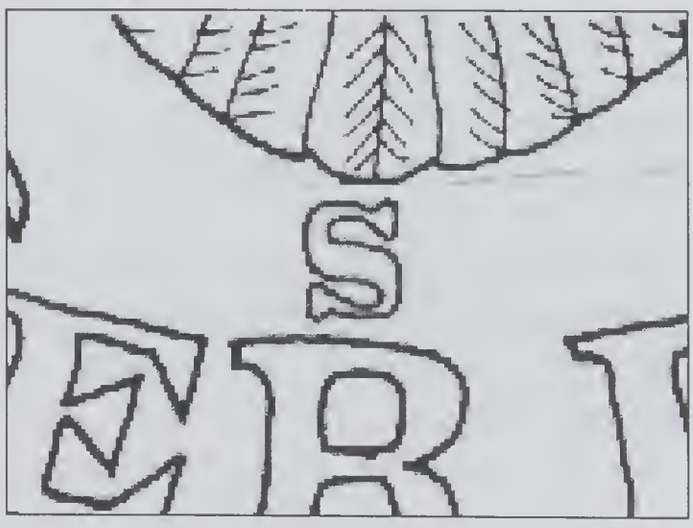


Overall, these differences would be meaningless if not for the extra, very collectable varieties that these various changes have made possible. Combined with the reverse hub changes, known large and small mintmark sizes and so forth we can expand a normal Barber quarter collection by perhaps dozens of pieces, creating a very unique and interesting collection that just as importantly, won't cost you an arm and a leg.

Barber Quarter Mintmark Types

To many collectors, an "S" is an "S," an "O" is an "O," and so on. While studying this series, I noticed some differences in the mintmarks of different years. Sure, there are always the filled digits, die chips, and extreme wear that can change their looks, but what I'm talking about here is the mintmark's logotype style. The quarter mintmarks don't exhibit the same wide variety as the dimes do, but are still interesting.

The First "S" Mintmark Plate: 1892 - 1897
This plate illustrates what I'll call "Style A," and shows the size and style of the mintmark punch used from inception in 1892 through and including the 1897 minted pieces. This punch is identical to that used on the Liberty Seated quarter series.



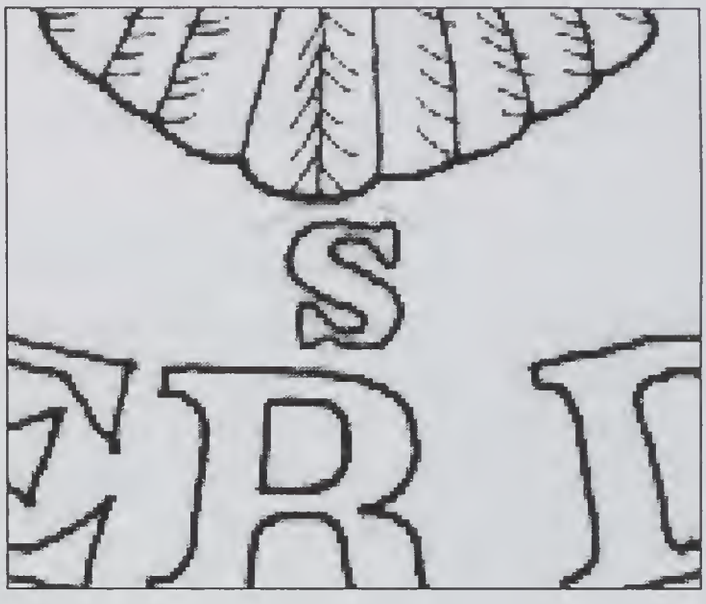
This style's characteristics include a fat and 'squarish' looking "S" with nearly closed loops and tall serifs.

When well-worn, or from a die chip, the inner loops can become closed and solid looking, but this is from wear, damage, or dirt and is not a distinct die

variety. Unfortunately, I've observed no overlap with 1898 dated pieces, (or 1897 dated pieces with the next style) - yet anyway - so check your collections!

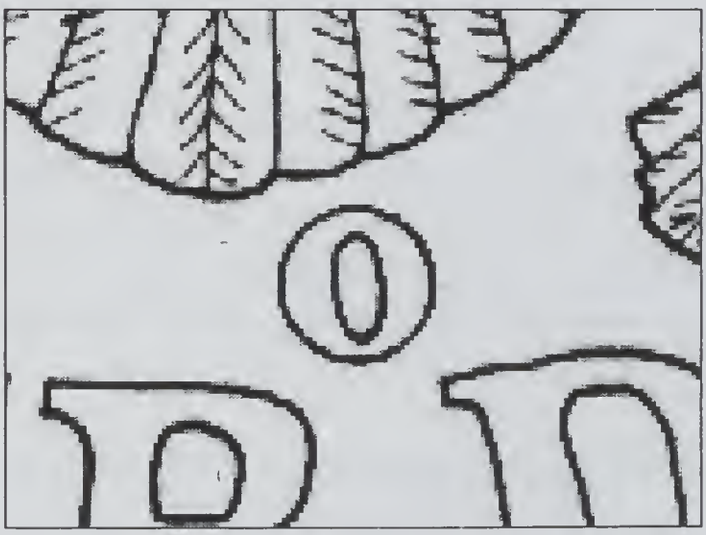
The Second "S" Mintmark Plate: 1898 - 1915

No quarters from San Francisco in 1916. This plate illustrates what I'll call "Style B," and pictures the style and size used throughout the balance of this series. This 'S' mintmark punch is noticeably rounder and is quite similar to the style used on the dimes from 1892 - 1899. This mintmark mimics the style used on the halves during that same early period. Again, no overlap with adjacently dated pieces. But keep looking.



The Only "O" Mintmark Plate: 1892 - 1909

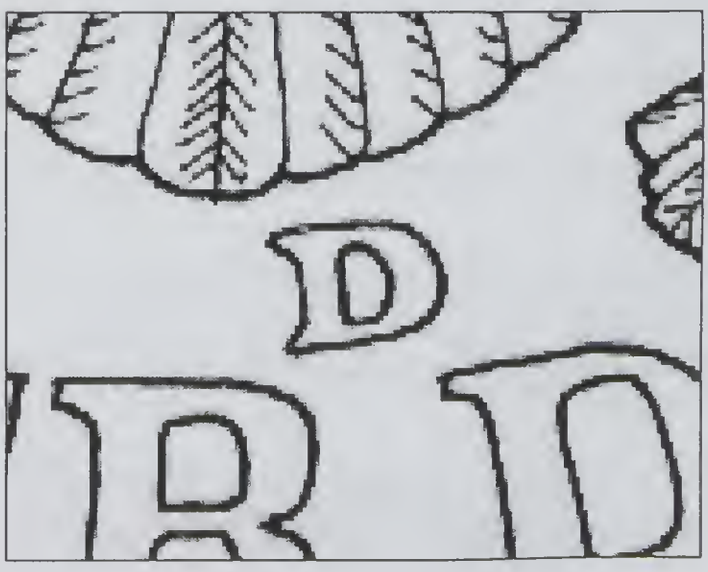
This plate illustrates what I'll call "Style A." Again, used in the previous Liberty Seated years, it continues into the Barber Quarter series. Characterized by an overall style as per the "S" Mint pieces, Style B. Fat sides, thin at the top and bottom and used throughout the quarter minting in New Orleans until its closing after 1909. No variations have been seen by this author.



The only 'D' mintmark plate: 1906 - 1916

This plate illustrates what I'll call "Style A." This type was the only one used throughout the Barber quarter's mintage at Denver. A large "D," again following more of a rounded and wide styling.

If you happen to come across any overlapping mintmark styles, we'd all like to hear about it.



Narrow Edge Reeding vs. Typical Wider Spaced Reeding

Another wrinkle of the quarters of 1892 involves their third surface - the edge. I have two 1892 Type I reverse, small date "S" mint quarters with narrow edge reeding - vs. the typical wider spaced reeding. This difference is also obvious to the naked eye. I've counted 124 individual reeds for the typical wider reeded edge, vs. 136 for the narrow reeded edge variety. I regard this too as a collectible and previously unreported variety, but who knows? I believe the narrow reeding is from an earlier collar used more commonly on Seated Liberty Quarters, as I think it can be found readily among that series, but I'm not a student of that set so I can't say for sure.

It would be helpful to note if this narrow reeded collar was used at other mints and in any other years. I also have an 1895-S quarter that was struck using this same narrow reeded collar, but have not seen any others. Admittedly, I haven't done a big search yet for these edge varieties. These probably were struck using a still serviceable stray collar or two from earlier times that the San Francisco Mint had lying about. I suspect that strict conformity always lost out to 're-use' and 'economy' at the mint in those days.

Can the quarters of 1892 get any more complicated? Probably, but I believe these small date/large date and narrow vs. wide reeded edge quarters are all new (or previously unreported) varieties.

Small Date/Large Date Differences

Being a variety collector (repunched dates, mintmarks and such) I look closely at such features on coins I see in my areas of interest at coin shows. Back around 1990, I noticed what I thought was a difference in the date numeral sizes between some different 1892 Barber quarters I was considering buying. The ones I was looking at were upgrades of ones I already had. I didn't think too much of it until I got them home and compared them to the other 1892's in my collection.

After comparing numerous pieces, I'm fairly certain that small date and large date varieties exist for 1892 quarters. I've found them on Type I and Type II

reverse pieces and from all three mints. I haven't seen these small date/large date varieties mentioned anywhere. Still, I find it hard to believe that these have been overlooked to date. My opinion is that these small/large date varieties are very collectible and need to be considered 'must haves' for a complete collection of Barber quarters - just as 1960 small and large date cents are for that set. Happily, none seem to be rare, though some may be more scarce that others.

Small Date

Large Date

Take a look at your 1892 quarters. Note any small date/large date differences. Then record which ones you have and the grades. I've got to believe some are more scarce than others. An unscientific poll indicates so far that Type I reverse, large dates from San Francisco and Type II reverse small dates from New Orleans and San Francisco may fill that bill. Conversely, I've found that Type I reverse, small dates from San Francisco are the most numerous in my collection. And as we've known, generally speaking, Type I reverses outnumber Type II.

Doubled Die, RPM, OMM, IMM, RPD, MPD and OVD Varieties

Editor's note: **John A. Wexler** *is a well-known numismatic researcher and author on error coins and die varieties. John has generously given permission to reprint material from his website:* <**http://www.doubleddie.com/1801.html**> *which I encourage any variety collector to visit. Great facts, information, and photos!*

"**Doubled dies** occur when there are mishaps in making the dies that will be used to strike the coins. ...for most of the Mint's die making history the master design for a coin was transferred to a **Master Hub** in a reduction lathe. These have recently been replaced by CNC (computer numerical control) milling machines, but the principal is still the same. The master hub is then used in a hubbing press to create **Master Dies**. The master dies are used in a hubbing press to create **Working Hubs**, and the working hubs are then used in a hubbing press to create **Working Dies**. It is the working dies that are then used to strike the coins in the coining presses.

In the Wexler Die Variety Files we define 'doubled die' doubling as doubling produced on hubs or dies as a result of a misalignment of the images on the hub and die at some point during the hubbing process. A more accurate term would be 'hubbing doubling,' but the term doubled die is clearly fixed in our culture and here to stay. The misalignment of the design images may have been when the master hub was squeezing an image onto a master die, when a master die was squeezing an image onto a working hub, or when a working hub was squeezing an image onto a working die. Just where the doubling occurs in this sequence will dictate how common the doubling will be, and that will affect the subsequent values for the doubled coins that are ultimately produced. Doubling can also occur in the process of transferring the design from the galvano to the master hub...

Since the vast majority of doubled die varieties that are reported to us are on coins from doubled working dies, that is where we will focus our attention here...

Prior to the use of single-squeeze hubbing presses..., the working dies were made in multiple-squeeze hubbing presses. For the first hubbing a die blank was placed on the bottom of the hubbing chamber. A working hub was locked into the top of the hubbing chamber directly above the die blank.

When the press was activated the working hub was lowered into the die blank with

hundreds of tons of pressure. The multiple-squeeze hubbing presses did not allow a deep enough penetration into the working die to make a satisfactory impression in the working die with just one hubbing. The working die had to be removed from the hubbing press and taken to an annealing oven where it was heat treated to relax the molecular structure and 'soften' the working die so that it could receive another impression from the working hub.

When the annealing process was completed, the working die was returned to the hubbing press to receive the next impression. For the second (and later) hubbings the set-up in the hubbing press was different than that used for the first hubbing. The working die was positioned on the bottom of the hubbing chamber with the working hub sitting directly on top of it. When activated, the top of the hubbing chamber lowered and again squeezed the working hub into the working die.

The hubbing and annealing processes were repeated until it was determined that a satisfactory image was on the working die. For some of the larger denominations it may have taken as many as nine or ten hubbings...

Since the working hub and working die were placed into the hubbing chamber manually, there was the possibility that the working hub would not be placed on top of the working die accurately. If there was any kind of misalignment of images between the working hub and the partially completed working die, doubled images would appear on the working die wherever these misalignments occurred. At this point a "doubled die" was born and if that doubled die was put into use to strike coins, all coins struck by that die would show exactly the same doubling...

Over the years it has been found that different types of misalignments between the images on the hub and the images on the die could occur. The various types of misalignments produced unique characteristics to the doubling found on the dies. Each identifiable type of misalignment of images produced one the "classes" of doubled die varieties...

When the Mint introduced the single-squeeze hubbing presses on a trial basis around 1985, and then to produce working dies at Denver and Philadelphia in 1996 and 1997, it had hoped to eliminate doubling produced during the hubbing process. Unfortunately for the Mint, this did not result and minor doubled dies are actually being produced more frequently on the new single-squeeze hubbing presses than they were on the older multiple-squeeze hubbing presses.

We believe that we know the reason for this. In the older multiple-squeeze hubbing presses the hub was fixed to the top of the hubbing chamber for the first hubbing. When it descended down into the face of the die it couldn't move as it made

contact with the die as it was locked into the top of the coining chamber.

In the single-squeeze hubbing presses the set up is different. The die blank is placed into the well of a collar placed in the bottom of the coining chamber. The hub is also placed into the well of the collar so that the face of the hub is resting on the conical point of the top of the die blank. Since the diameter of the well in the collar has to exceed the diameter of the die blank and the hub (so that the die blank and hub can be inserted into and removed from the collar, and so that the hub can be pushed downward into the die), there is "play" in the collar well. It allows for some horizontal movement between the hub and the die when the hubbing process begins. There is even the possibility of some rotational movement. It also allows for the hub to be tilted with respect to the die prior to the start of the hubbing since it is sitting unrestrained on top of the die blank in the collar well.

Since the hub is slightly tilted at the time the hubbing begins, as it is pushed down into the collar well and into the die blank it will be forced into a more vertical alignment in the collar well. If there is some resistance to the vertical realignment when the hubbing begins, it may snap back into proper alignment at some point as the hubbing proceeds. Hubbing press operators have described a "clunking sound" that is heard when the hub snaps back into proper alignment. When this happens, there will be a misalignment between the image formed prior to the hub snapping into alignment and the image formed after the snap. The result is doubling. Because the hub is not fixed to the top of the hubbing chamber as it was in the multiple-squeeze hubbing presses, the movements resulting from the "play" in the well of the hubbing chamber seem to occur frequently producing minor doubled dies.

Because of how these doubled dies are being produced, the affected area tends to be the center of the die. That is due to the fact that the point of the conical top of the die blank is the first contact point with the hub and it usually doesn't take very long into the hubbing for the hub to snap or move into a more proper vertical alignment. While the entire obverse and reverse should always be examined carefully, the most likely place to find doubling on dies produced on the single-squeeze hubbing presses is at the center of the die (coin)...

Because of the manner in which the dies receive doubled images through the hubbing process, it is important to realize that doubling seen on doubled dies will be seen as raised and rounded secondary images, just like the normal images on the coin. Doubled letters will often show 'splits' in the serifs of the letters whenever the letters have serifs. If the letters have squared off corners, those corners will often show strong 'notches.' The separation between the doubled design images is referred to as the spread of the doubling. The spread of the doubling can be very wide or it can be extremely close."

Other Forms of Doubling

Mechanical Doubling, the most common form of doubling, is "referred to as 'ejection doubling,' 'machine doubling,' 'strike doubling,' 'shift doubling,' and 'shelf doubling.' The primary characteristic... is that the secondary image (doubling) has a flat, shelf-like appearance. On genuine doubled dies the secondary image is raised and rounded just like the primary image. Also, genuine doubled dies are characterized by a splitting of the serifs on letters with serifs, or a "notching" of the corners of the letters which are doubled. This splitting of the serifs or notching of the letter corners will not be found on coins with mechanical doubling.

...mechanical doubling is the result of loose parts in the coining press. These loose parts allow the dies to shift slightly at the moment of impact when the coin is being struck. This slight shifting of the dies is what causes the flat, shelf-like appearance of mechanical doubling.

...**Die Deterioration Doubling** "is actually on the die itself... Die deterioration doubling results when the dies used to strike coins are kept in use for too long a period of time... True doubled dies generally show doubling in a single direction on the affected letters. On examples of coins with die deterioration doubling, you are likely to find that the doubling will be on both sides of the letters. Also, ...the affected letters or other design elements will have a mushy appearance..."

Abrasion Doubling "...gets its name from the fact that it is caused by rubbing an abrasive on the face of the die. This is done deliberately and as a matter of routine in an attempt to remove die clash marks..."

Repunched Mint Mark (RPM) Varieties: "When the Mint started using mint marks (letters) in the early 1800's to identify the various branch mints at which coins were being struck, the mint mark was hand punched into the working dies that would be striking the coins. It was the last portion of the design to be placed on the die...

If there was any kind of movement of the mint mark punch in between the taps of the mallet, the die would end up with a doubled, tripled, or even quadrupled mint mark. Usually, the multiple mint mark impressions would be overlapping images, but in some extreme cases the mint mark impressions would be totally separated.

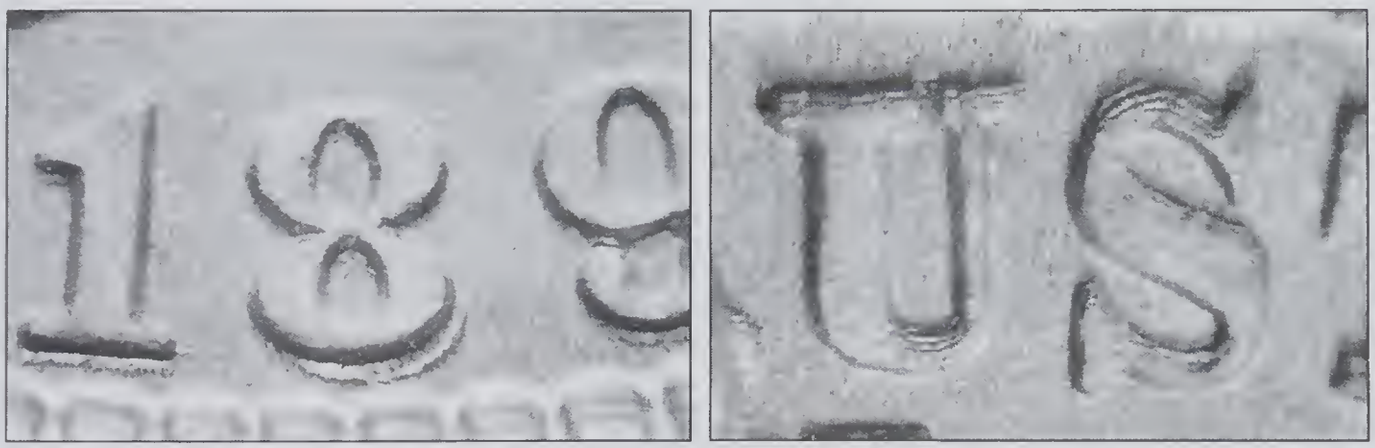
When the multiple mint mark impressions are from the same mint mark (a D punched over a D, or an S punched over an S), the variety is known as a Repunched

Mint Mark (RPM) variety...

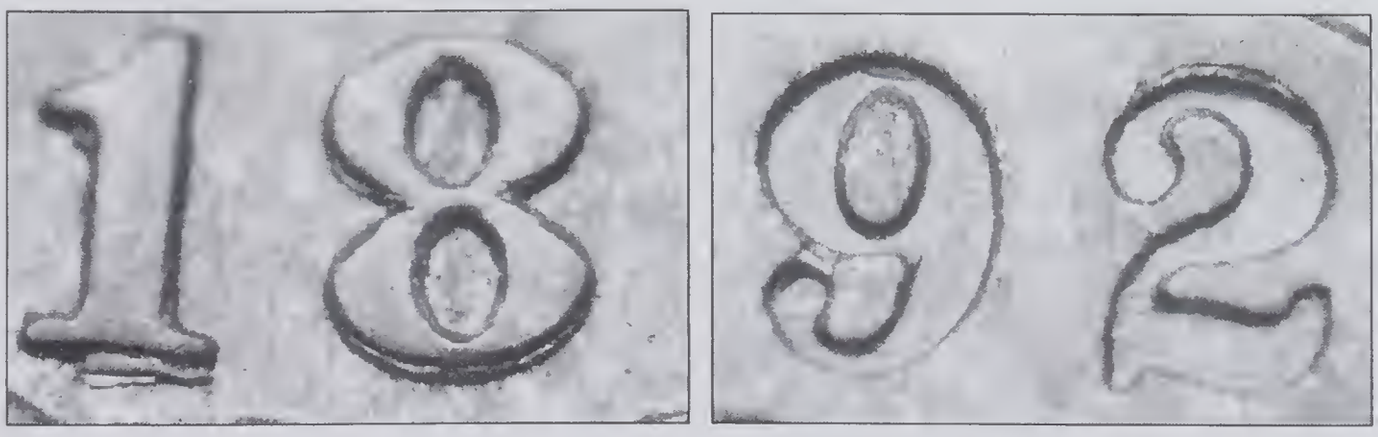
Over the years mint mark varieties have been found where mint marks for two different mints were applied to the same working die... Varieties such as these are known as **Over Mint Mark (OMM) varieties**.

Inverted Mint Mark (IMM) Varieties "resulted when a mint mark was punched into a working die in an inverted or 'upside down' position from the intended position of the mint mark."

Repunched Date (RPD) Varieties: "Like other design elements around the rim, the digits of the date required more than one blow of the mallet to leave a satisfactory impression in the die. If there was some misalignment of the hand-held punch and the image already in the die from the previous punch, the result was one or more doubled digits in the date."

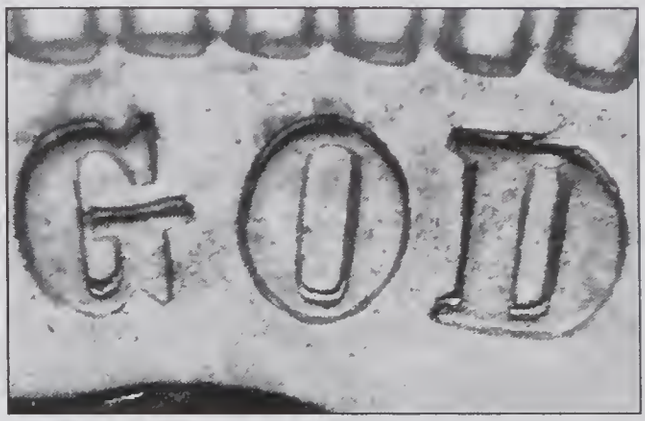


These photos of John's 1892 Barber Quarter, which he listed in his files as **1892 25¢ WRPD-001**, *show repunched digits (189) spread to the north. This same coin also has a quadrupled obverse die which John has listed as* **1892 25¢ WDDO-001**. *The quadrupling shows on the stars, IN GOD WE TRUST, and the outer ribbon.*



John has this 1892 Barber Quarter listed in his files as **1892 25¢ WRPD-002**. *It shows a repunching spread to the north on the 1 and 8, but the 2 is clearly repunched to the south.*

Like WRPD-001, the obverse of John's 1892 25¢ WRPD-002 is also a doubled die. A nice Class II spread towards the center is seen on the stars, the bottom and left side of the ribbon, IN GOD WE TRUST, and very slightly on the outside of the bonnet and the profile. John has this doubled die listed in his files as **1892 25¢ WDDO-003**.



Misplaced Date (MPD) Varieties: "...are a form of repunched date, but this group features digits that are punched a significant distance from where they were supposed to be punched. The errant digits usually ended up in the denticles around the rim. Sometimes, however, these misplaced digits ended up being punched into parts of the lower central design..."

Overdate (OVD) Varieties: "Overdates occur when two different dates are punched into the same working die... The existence of these varieties most likely represents an effort on the part of the Mint to not waste leftover working dies at the end of a production year. Rather than throw out a perfectly good die, it was more economical to simply repunch the last digit or the last two digits in the date so that it could be used for the next production year's coinage."

Upcoming BCCS Regional Meetings

• **FUN 2012** (Florida United Numismatists), Orlando, FL Friday January 6, 3:00 p.m. The BCCS will have a Club Table on the bourse floor, so please stop by!

• **Long Beach Expo**, Friday February 3, 3:00 p.m.

• **Charlotte 42nd Annual Coin Show**, February 10-12, TBD. Please check website for exact date and time.

• Whitman Baltimore Expo, Friday March 23, 3:00 p.m.

• **PNNA Spring Convention**, Tukwila (Seattle), WA, April 13-15, TBD

• **Central States**, Schaumburg, IL, April 18-21, TBD